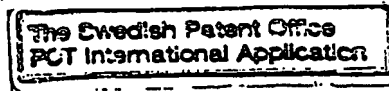


118656 AM
2005-05-23



10/572346
PCT/SE 2004/001349

24-05-2005

13

LAP12 Rec'd PCT/PTO 17 MAR 2006

CLAIMS

1. A product carrier, moveable along a conveyor track (33, 34) in a conveyor arrangement, and designed as a trolley, which has at least two wheel units (3, 4) which are designed to be moved along the conveyor track, and a carrier arm (5, 6) which is pivotally suspended from each wheel unit and which is provided with carrier members (7, 8) for the products that are to be conveyed, said carrier arms (5, 6) being connected to one another by means of a positioning mechanism (9/45, 50, 51), **characterized in that** the carrier arms (5,6) are pivotally supported in a holder (10) in which the positioning mechanism is arranged and that said positioning mechanism maintains a selected essential distance (a) between the wheel units (3,4) regardless of the inclination of the track.

2. The product carrier as claimed in claim 1, **characterized in that** the positioning mechanism (9/45, 50, 51) comprises a parallel guide mechanism which essentially keeps the carrier arms (5, 6) parallel to one another, regardless of the inclination of the track, so that said distance (a) in relation to one another is largely maintained.

3. The product carrier as claimed in claim 1, **characterized in that** the positioning mechanism (9) comprises a toothed gearing having a number of gearwheels (19, 20, 21), which are rotatably supported in the holder (10).

4. The product carrier as claimed in claim 2 and 3, **characterized in that** the holder (10) is designed as a box in which the gearwheels (19, 20, 21) are rotatably supported and that the gearwheels comprise two outer gearwheels (19, 20) which are designed to follow the swiveling movements of the carrier arms (5), and an intermediate gearwheel (21) which intermeshes with the outer gearwheels, the two outer gearwheels having the same diameter.

5. The product carrier as claimed in claim 2, characterized in that the parallel guide mechanism (45, 50, 51) has parallel arms (45, 50, 51); which are directly or indirectly articulated in the carrier arms (5, 6) at a uniform distance.

6. The product carrier as claimed in claim 1, characterized in that the wheel units (4, 5) can be turned about their axes of rotation (17, 18) for adjustment to curved sections of the conveyor track (33, 34).

7. The product carrier as claimed in claim 6, characterized in that the distance (a) between the wheel units (5, 6) is variable within narrow limits.

8. The product carrier as claimed in claim 7, characterized in that the turning of the wheel units (3, 4) is achieved by torsion of the carrier arms (5, 6) about their longitudinal axis.

9. A conveyor arrangement comprising a first conveyor (33) and at least a second conveyor (34) together with a number of product carriers (1) designed as trolleys which are moveable along the conveyors for moving products, the first conveyor comprising a continuous track, and the trolleys having wheel units (3, 4) designed to run along the track, and the second conveyor comprising a chain conveyor in the form of a loop of links (36, 37) designed with members for receiving and holding the transported trolleys, said holding members being situated at a selected spacing interval (b) from one another, characterized in that the wheel units (3, 4) have pivotal suspended carrier arms (5, 6), which are connected to one another by means of a positioning mechanism (9/45, 50, 51) for maintaining a selected positional relationship between the wheel units, so that the wheel units essentially maintain an axial distance (a) from one another which largely corresponds to said spacing interval (b), and that the carrier arms are pivotally supported in a holder (10) in which said positioning mechanism is arranged.

10. The conveyor arrangement as claimed in claim 9, characterized in that the reciprocal axial distance (a) is variable within narrow limits for adjustment to changes in the spacing interval (b) of the second conveyor (34).